

## Chemical Storage Guide

Always refer to the SDS. This guide is not meant to cover all possible scenarios. Contact the Chemical Safety Group with questions – 434-982-4911

| <br><b>Flammable liquids</b>   | <br><b>Acids</b>                           | <br><b>Bases</b>                            | <br><b>Oxidizers</b>                        | <br><b>Toxics</b>   | <br><b>Compressed gases</b>   | <br><b>Poison inhalation</b>                | <br><b>Water reactive</b>               | <br><b>Liquid nitrogen</b>   |
|---|---|---|--|--|--|--|--|---|
| <p>Do not store with acids or oxidizers</p> <p>Only store in refrigerators rated for flammables</p> <p>Keep quantities to a minimum (no 5 gallon cans permitted)</p> <p>Amounts over two(2) gallons: Store in an approved flammable cabinet</p> | <p>Do not store with bases, flammables, or cyanides</p> <p>Do not store under the sink</p>                                  | <p>Do not store with acids</p> <p>May be kept with flammable liquids if in secondary containment</p>                          | <p>Do not store with flammable liquids or solids</p> <p>Do not store under the sink</p> <p>Avoid storage on wooden shelves</p> | <br><b>And other Health Hazards</b> <p>Store on sturdy shelves below eye level or in secured cabinets</p> <p>Store separate from other hazard classes</p> | <p>Secure at all times even when empty</p> <p>Store away from heat sources</p> <p>Store with cap when regulator is removed</p> <p>Incompatible gases must be separated by a 30 minute fire barrier or 20 feet or line of sight</p> | <p>Store in a vented gas cabinet or a chemical fume hood</p> <p>Secure at all times</p> <p>Store with cap or plug in place</p> | <p>Do not store under the sink</p> <p>Store away from aqueous solutions</p> <p>Keep separate from other hazard classes</p> | <p>Store in a well ventilated area</p> <p>Consult EHS before storing 240L tanks</p>                             |
| <p><b>Examples</b></p> <p>Acetone<br/>Methanol<br/>Ether<br/>Hexane</p>   | <p><b>Examples</b></p> <p>Sulfuric acid<br/>Hydrochloric acid<br/>Nitric acid<br/>Acetic acid</p>                           | <p><b>Examples</b></p> <p>Sodium hydroxide<br/>Potassium hydroxide<br/>Bleach</p>   | <p><b>Examples</b></p> <p>Silver nitrate<br/>Ammonium persulfate<br/>Sodium periodate</p>                                      | <p><b>Examples</b></p> <p>Sodium cyanide<br/>Sodium azide<br/>Aniline<br/>Ethidium bromide</p>   | <p><b>Examples</b></p> <p>Helium<br/>Nitrogen<br/>Oxygen<br/>Hydrogen</p>  | <p><b>Examples</b></p> <p>Carbon monoxide<br/>Chlorine gas<br/>Ethylene oxide<br/>Ammonia gas</p>                              | <p><b>Examples</b></p> <p>Sodium borohydride<br/>Hydrazine<br/>Sodium metal<br/>Phosphorus</p>                             | <p><b>Example</b></p> <p>LN</p>   |
| <p><b>Special circumstances</b></p> <p>Combustible liquids (i.e. toluene) can be stored in the flammable cabinet if there is room.</p>  | <p><b>Special circumstances</b></p> <p>Some acids are flammable (i.e. Acetic acid) but still store them with the acids.</p> | <p><b>Special circumstances</b></p> <p>Some bases are flammable (i.e. ethanol amine) but still store them with the bases.</p> | <p><b>Special circumstances</b></p> <p>Some acids are oxidizers (i.e. nitric acid) but still store them with the acids.</p>    | <p><b>Special circumstances</b></p> <p>Inspect containers regularly.</p>   | <p><b>Special circumstances</b></p> <p>Container volumes less than 5 liters (i.e. lecture bottles) can be stored lying down.</p>   | <p><b>Special circumstances</b></p> <p>Consult with EHS when storing or using these materials.</p>                             | <p><b>Special circumstances</b></p> <p>There may be enough moisture in the air to react these materials. Use caution.</p>  | <p><b>Special circumstances</b></p> <p>Liquid nitrogen tanks vent loudly periodically. Do not be concerned.</p> |